IWG-2 and IWG-7 Date: October 29, 2002 IWG-7/105 (rev.1) IWG-2/041 Authors: Leslie Taylor (301) 229-9410, Itaylor@lta.com and Giselle Creeser, (703) 790-1938, ggomezc@msn.com

WRC-2003 Advisory Committee

Comments on Proposed Agenda Item USA//2 and USA//3 From IWG-2 and IWG-7

IWG-2 and IWG-7 Comments on Proposed Agenda Item USA//2 and USA//3

Agenda Item 7.2: to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, taking into account Resolution 801 (WRC-2000).

Background: The NTIA, on September 26, 2002, forwarded to the FCC, two proposals to add two items to the agenda to the 2006 WRC. The purpose of the agenda items is to provide an allocation for runway incursion systems and other aeronautical applications in the 5091-5150 MHz band.

The band 5091-5150 MHz currently is allocated on a primary basis to aeronautical radionavigation. By footnote, it also is allocated, on a primary basis, to the fixed-satellite service (Earth-to-space) limited to feeder links of non-geostationary mobile-satellite systems (RR5.444A). Other applicable footnotes are RR 5.367 which provides that the 5000-5150 MHz band also is allocated to the aeronautical mobile-satellite (R) service subject to agreement obtained under No. 9.21. and RR5.444 which provides that the band 5030-5150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing and that the requirements of this system shall take precedence over other uses of this band.

Currently, the Globalstar MSS system utilizes the 5091-5150 MHz band (and the 5150-5250 MHz) band for its feeder links (Earth-to-space). This system operates with gateway earth stations located throughout the world and it is anticipated that additional gateway earth stations will be implemented over the next few years. Prior to WRC-95, when the

FSS allocation was adopted in the 5091-5150 MHz band, studies were undertaken concerning the compatibility and means of sharing between NGSO MSS feeder links and aeronautical radionavigation systems, in particular, the MLS. To facilitate such sharing, Globalstar gateway earth stations in the U.S. are coordinated through IRAC. Other countries similarly ensure that the gateway earth stations are located so as not to interfere with MLS systems operating in the aeronautical radionavigation service.

Comments of IWG-2 and IWG-7 on the Proposed New Agenda Items:

IWG-2 and IWG-7 believe that a number of critical issues must be addressed regarding these proposed agenda items.

Comments on Agenda Item / /2

USA//2 ADD

2.xx to consider a new worldwide primary allocation to accommodate a system that would provide supplemental radionavigation data in the band 5091-5150 MHz;

- This proposed agenda item is very unclear a new worldwide primary allocation to what service? Allocations are to services, not systems. Additionally, in the reason section the author indicates that the AVPS would operate in the aeronautical radionavigation service, which is already allocated in the band. So is the "new worldwide primary allocation" for the ANLE system? The brief descriptions of the systems to be accommodated sound more like mobile systems.
- The ANLE and AVPS systems are not described in any detail. There is a need for
 detailed technical characteristics of these systems in order to understand under what
 allocation they could operate and if they are compatible with other existing
 allocations. This work should be carried out in the ITU-R prior to consideration of
 new allocations.
- Further, there is no study to support how much spectrum is required for these systems. Moreover, there are no studies to show that the 5091-5150 MHz band is the only band where these systems can operate. Depending on the allocation needed for these services there may be other bands with suitable allocations that are appropriate for these systems. At a minimum, availability and suitability of other bands allocated to the aeronautical radionavigation service should be studied.

Comments on Agenda Item / /3

USA//3 ADD

2.xx to consider a new worldwide primary allocation to accommodate the aeronautical fixed service links in the band 5091-5150 MHz;

With regard to the second proposed agenda item, IWG-2 and IWG-7 have the following questions and comments:

- Currently there is no ITU definition for the aeronautical fixed service. This service
 was deleted from the ITU Radio Regulations a number of years ago. Careful thought
 needs to be given before an administration proposes the creation of a new allocation.
 If this approach is pursued, it seems that another agenda item would be needed to
 consider adding a definition for aeronautical fixed service to Article 1 of the Radio
 Regulations. A compelling rationale for doing so would need to be provided.
- What are the specific requirements that need to be met by the proposed new aeronautical fixed allocation and what are the spectrum requirements for a new service? The background section indicates that these services are currently being provided in other bands allocated to the Fixed and Mobile services. There are no studies indicating why the bands currently being used are no longer appropriate or adequate to meet the needs described. Perhaps if there are technical difficulties in using the current bands then other bands already allocated to the Fixed and/or Mobile service should be considered or additional ITU-R Recommendations should be developed to better utilize the currently used bands.
- What are the technical and operational characteristics of the systems which would be operated in the proposed new aeronautical fixed service? In considering a possible agenda item, this information would need to be developed within the ITU-R.
- How would the systems in the proposed new service share with other co-primary services such as aeronautical radionavigation, FSS and others? To proceed with an agenda item regarding a proposed new service, a resolution would be useful to call for the development of requirements, identification of suitable bands and evaluation of sharing, including possible sharing mechanisms, with other services with allocations in the band.

Given the above issues IWG-2 and IWG-7 recommend these concerns be addressed prior to further evaluation of the Draft Proposals contained in the NTIA letter dated 26 September 2002.